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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently amended) A method of controlling an access of a station to a shared wireless media comprising:

calculating a first probability value representing a probability of a first station to transmit a data packet within a desired time slot of a contention window by counting data packets transmitted within said contention window to provide a first number, counting the data packets transmitted from said first station to provide a second number and dividing said second number by said first number;

calculating a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by a second station; and

controlling an access of a transmitting a data packet from said first station to a shared wireless media based on a collision rate parameter calculated from at least said ~~[[a]]~~ first and said second probability values, representing a probability to transmit by the first station a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by a second station.

2. (Cancelled)
3. (Cancelled)
4. (Cancelled)

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5. (Currently amended) The method of claim 1, ~~comprising~~ wherein said second probability value is calculated ~~calculating the second probability~~ by counting ~~a first number of~~ data packets transmitted within said desired slot to provide a third number;
counting ~~a second number of~~ data packets transmitted within said contention window to provide a fourth number; and
~~calculating the second probability value by~~ dividing the third first number by the fourth second number.
6. (Original) The method of claim 5, comprising:
storing the first number in a first array and storing the second number in a second array, wherein a common index to the first and second arrays indicates on the desired time slot of the contention window of which the first number and the second number related to.
7. (Original) The method of claim 6, comprising:
transmitting an additional data packet by the first station;
recalculating the second probability value; and
updating the first and second arrays according to the recalculated second probability.
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Currently amended) ~~[[The]]~~ A station ~~of claim~~ comprising: [[9]],
a processor to control transmission between the station and a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the station within the desired time slot of said contention

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window, to collide with at least one other data packet transmitted by another station; and

a transmitter to transmit a data packet to said shared wireless media responsive to the control of said processor.

wherein the processor comprises:

a first counter to count a first number of data packets transmitted within said desired slot; and

a second counter to count a second number of data packets transmitted within said desired slot or within at least one other slot of said contention window.

13. (Original) The station of claim 12 comprising:

a software module to calculate the second probability by dividing the first number with the second number.

14. (Original) The station of claim 12, wherein the processor comprises:

a first array to store the first number;

a second array to store the second number; and

an index counter to provide an index of the desired time slot to the first array and to the second array.

15. (Original) The station of claim 12, wherein the processor comprises:

a third counter to count a third number of data packets transmitted within said contention window;

a fourth counter to count a fourth number of data packets transmitted from a station; and

a software module to calculate the first probability by dividing the third number by the fourth number.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently amended) ~~[[The]]~~ A station of claim 16 comprising: [[.]]

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a processor to control transmission between the station and a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the station to transmit the data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by another station; and

a transmitter and an internal antenna to transmit a data packet to said shared wireless media responsive to the control of said processor.

wherein the processor comprises:

a first counter to count a first number of data packets transmitted within said desired slot; and

a second counter to count a second number of data packets transmitted within said desired slot and within at least one other slot of said contention window.

20. (Original) The station of claim 19 comprising:

21. a software module to calculate the second probability by dividing the first number with the second number.

22. (Original) The station of claim 19, wherein the processor comprises:

a first array to store the first number;

a second array to store the second number; and

an index counter to provide an index of the desired time slot to the first array and to the second array.

23. (Original) The station of claim 19, wherein the processor comprises:

a third counter to count a third number of data packets transmitted within said contention window;

a fourth counter to count a fourth number of data packets transmitted from a station; and

a software module to calculate the first probability by dividing the third number by the fourth number.

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24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Currently amended) ~~[[The]]~~ A wireless communication system comprising:
~~of claim 23,~~

a first station and a second station wherein at least the a first station having a processor to control an access of the first station to a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the first station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by the second station;

wherein the processor comprises:

a first counter to count a first number of data packets transmitted within said desired slot; and

a second counter to count a second number of data packets transmitted within said desired slot and within at least one other slot of said contention window.

28. (Currently amended) The wireless communication system of claim ~~[[23]]~~
26, wherein the first station comprises:

a software module to calculate the second probability by dividing the first number with the second number.

29. (Original) The wireless communication system of claim 26, wherein the processor comprises:

a first array to store the first number;

a second array to store the second number; and

an index counter to provide an index of the desired time slot to the first array and to the second array.

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30. (Original) The wireless communication system of claim 26, wherein the processor comprises:

a third counter to count a third number of data packets transmitted within said contention window;

a fourth counter to count a fourth number of data packets transmitted from a station; and

a software module to calculate the first probability by dividing the third number by the fourth number.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Currently amended) [[The]] An article comprising a storage medium, having stored thereon instructions, that when executed, result in: of claim 30,

controlling an access of a first station to a shared wireless media based on a collision rate parameter calculated from at least a first probability value, representing an attempt by the first station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by a second station;

~~wherein the instructions when executed, result in:~~

counting a first number of data packets transmitted within said contention window;

counting a second number of data packets transmitted from a station to provide a second number; and

calculating the first probability by dividing the second number by the first number.

35. (Currently amended) The article of claim ~~[[30]]~~ 33, wherein the instructions when executed, result in:

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calculating the second probability by counting a first number of data packets transmitted within said desired slot;

counting a second number of data packets transmitted within said contention window; and

calculating the second probability value by dividing the first number by the second number.